

The Tradition of Mentoring Part I: Mentoring the Researcher

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Editorial Note

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Author's Note

The opinions in this text are those of the author and do not reflect the official policy or positions of the United States Government, the Department of Defense, the Department of the Navy, or Navy Medicine. The author is indebted to the mentorship and contributions of thought and substance to many of the concepts provided to this lecture by CAPT David Harlan, MC, US Public Health Service.

Abstract

This text is a summary of reflection points and notes from Part I of a two-part lecture on the Tradition of Mentoring. In this lecture, basic historical concepts on the origins of mentoring were reviewed. Of particular importance were several reflections concerning how effective mentoring differs from other forms of leadership and training in the professions.

Lecture Summary and Reflections

Origins

Although the term *mentor* is used widely in a variety of implied connotations, few understand its history and the context of its classical definition. It is this definition that provides the basis for creative freedom to spawn the purest of scientific research, well supported by ideas already tested.

Mentor comes to us from the reservoir of Greek mythology, where the story is told of Odysseus as he prepares to leave for the Trojan War. He entrusts Mentor, his closest friend,

with the primary responsibility of guiding and developing masteries in his son, Telemachus. During the course of the story, Athena, the goddess of wisdom and a particular patron of Odysseus, comes to Telemachus to pass on the gift of wisdom. At that time Odysseus had been at war for over 10 years, so suitors were pursuing his wife, Penelope, in an attempt to convince her that her husband was dead. As a result, Athena, finding herself the target of collateral attentions, needed to protect herself from these suitors, who were always nearby. She therefore took on the form of Mentor, who the citizens knew to be training Telemachus. In becoming Telemachus' *mentor*, Athena provided him with wisdom, the inspiration to learn of his father and to emulate him in providing protection for his mother. Interestingly, what arises from the story is that Mentor (Athena) seeks to instill in Telemachus a sense of protecting that which is good and learning that which is best. It is a story of teaching someone to prevent harm and advance the good.

Where this classical definition is retained in modern use, the term *mentor* implies a trusted friend, counselor, or teacher—one who is more experienced and who may have a traditional opinion, but tests the application of divergent opinions through elaboration, as they develop, in the mind of her or his protégé.

Examples from Philosophy

The three greatest philosophers, writers, and scientists of all time—Socrates, Plato and Aristotle—were in direct lineage of a *mentoring thread*. Socrates mentored Plato, who mentored Aristotle. We do see differences in the philosophical treatises of these three great figures, however, so it goes without saying that mentoring does not equate with copying or developing sameness. Instead, mentoring is a determinant of discipline and the ability to apply knowledge to skill.

For example, Socrates, Plato's mentor, held in highest priority *ethics*, the *ironic* method of teaching and adherence to *truth*, in its most uncloaked clarity. He employed the teaching method of illustrating, which is akin to parable telling, but used actual fact in demonstrating a poignant twist of motive, cause and effect.

Plato subsequently led the development of what we know as Western Philosophy. Although he was like a conjoined twin to Socrates, he did not copy his mentor. Instead, he expanded and developed the concept of applied ethics and the application of *logic* while suggesting that the basis of what was *true* in this world, from which logical explanations were to be based, was a portion of gifting from the higher beings or gods.

Aristotle, in turn, could never be accused of copying Plato as he stirred the origins of the scientific method by promoting the value of the *empirical* rather than accepting *what is* as a gift from on high. While he applied the ethics and morality of Socrates and the logic of Plato, his use of *science and empirics* was his own. He went on to develop the application of these concepts into politics and metaphysics. He did not believe that one waited for the passive expression of *science and empirics*, but vigorously espoused *scholarship*.

A fourth great figure in the ancient world of Greek and Macedonian civilization was Alexander the Great. This astounding military leader was mentored by Aristotle who, after 10 years,

realized that had had completely “filled” Alexander with his formulas, and so passed him on to Leonidas for further mentoring. This transference exemplifies wisdom, as it suggests that mentors must recognize when they have contributed all they can to their protégé’s experience, then pass them on to individuals who can nurture the progression of new skills.

Other Historical Examples

Among other ancient and contemporary examples that are valuable to recall:

1. According to biblical record, Elijah mentored Elisha. In the traditional mentoring process, the protégé typically selects her or his mentor, but in this case Elijah chose Elisha. This relationship endured multiple tests following its inception; Elijah tries to send Elisha away, but he does not wish to go. This example, the reverse of what we customarily experience today, suggests a healthy maturing of the mentor-protégé relationship.
2. Near the end of the Middle Ages, both the nature of education and the approach to mentoring changed. The Renaissance, Reformation, and Counter-Reformation were volatile periods. As the development of scholars was no longer bound to one or another religious denomination, we find examples of mentoring that resulted in extremely fruitful intellectual development. We see the introduction of the concept of universal opportunity for development of intellectual capability of the masses. This change developed in part thanks to the mentoring of Jan Amos Komensky by the advocate and Irish Jesuit William Bathe, Johann Piscator, Heinrich Gutberleth, and Heinrich Alsted. So effectively did Komensky apply this method of mentoring students who came *from the masses*, that he was later persecuted under the Counter Reformation.
3. Johann Sebastian Bach mentored his son, Johann Christian Bach. He in turn mentored Mozart, 21 years his junior, by offering to this recognized genius the same “head start” his father had provided him.
4. Freddie Laker, the founder of discount air fares (unheard of at the time he promoted them) mentored Richard Branson, the multi-billionaire who not only has championed more realistic airfares but combined them with superior and innovative service and accoutrements.
5. The Tour-de-France champion, Eddy Merckx, mentored the record-shattering Lance Armstrong.
6. Dr. Steve Brodie, an internationally lauded scientific genius in neuropsychchemistry, mentored Drs Erminio Costa, Julius Axelrod, Candace Pert, and Sol Snyder in his laboratory. While Dr. Brodie was never so recognized, all four of his protégés were nominated for the Nobel Prize in Science and one, Julius Axelrod, won this honor. This example suggests that mentorship can be *broadcast* rather than dependent on some *magical chemistry* or a unique fit between mentor and protégé.

The Relationship of Mentors and Mentees: Convergence and Divergence

Are mentors both friends and friendly? Not necessarily, but they do care about the mentee. For example, Sir William Osler mentored Drs. Ochsner and Cushing, and Gertrude Stein; Robert E. Lee mentored Generals Jackson, Stewart, and Longstreet.

Vince Lombardi, coach of the Green Bay Packers, mentored football stars, including Bart Starr, Paul Hornung, Bill Curry, and Jerry Kramer, who was quoted as saying, *“Lombardi treated us all the same, like dogs.”* Willie Davis, another of Lombardi’s protégés, said after both his father and Lombardi had passed away: *“I loved my dad and think of him often. I think of Coach Lombardi every day.”*

It is important to understand how role models, teachers, and mentors differ.

Table 1. *The Differences Between Role Models, Teachers, and Mentors*

	Role Model	Teacher	Mentor
Function	An ideal to which one can aspire	Transmits knowledge	Guides a protégé to learn attitudes and difficult skills
Characteristic	Moral/ethical rectitude, courage, vision, energy	Empathy, the ability to “engage,” subject matter expert, selflessness	Moral/ethical rectitude, empathy, experience, honesty, selflessness
Visibility	Often famous, well-known within the community	Often anonymous	Variable recognition within and outside the community

The role model does not rely on a direct interaction with a student. Others may spontaneously wish to emulate the role model without the latter being aware of them at all. Mohandas Gandhi and Theodore Roosevelt are leaders who have been recognized as role models but not mentors.

The teacher, on the other hand, is in contact with, and directly influences, the student over a defined period, during which the mentoring relationship achieves variable clarity, dependent to some degree on the success of the didactic process. Almost immediately following this educational period, there is very little if any continuation of the mentoring process. Both mentor and mentee diverge, though not without a lasting impact.

Some Points for Reflection

Cartoonist Charles Schulz produced the following two tests to reflect the effectiveness and durability of various people who have influence over others:

- Test #1
1. Name the world’s five wealthiest people.
 2. Name the last five Heisman trophy winners.

3. Name the last five Miss America contest winners.
4. Name ten people who have won the Nobel or Pulitzer prize.
5. Name the last half dozen Academy Award winners for Best Actor and Actress.
6. Name the last decade's worth of World Series winners.

Test #2

1. List a few teachers who aided your journey through school.
2. Name three friends who have helped you through a difficult time.
3. Name five people who have taught you something worthwhile.
4. Think of a few people who have made you feel appreciated.
5. Think of five people you enjoy spending time with.
6. Name half a dozen heroes whose stories have inspired you.

The lesson inherent in Schulz's tests is that the people who made a difference in your life are the ones you knew cared about you.

There are also lessons to be learned wherein role models, leaders, and mentors share equal effectiveness. Consider, for example, the concept of humility noted by Mohandas Gandhi, who said, "It is unwise to be too sure of one's own wisdom. It is healthy to be reminded that the strongest might weaken and the wisest might err."

Likewise, Alexander Hamilton, a well respected leader, said,

"In common life, to retract an error, even in the beginning, is no easy task. Perseverance confirms us in it and rivets the difficulty... To this, we may add that disappointment and opposition inflame the minds of men and attach them still more to their mistake."

Sir William Osler identified "That greatest of ignorance – the ignorance which is the conceit that a man knows what he does not know."

In 1907, Osler addressed the Congress of American Physicians and Surgeons, saying:

The limits of justifiable experimentation upon our fellow creatures are well and clearly defined... For man absolute safety and full consent are the conditions which make such tests allowable. We have no right to use patients entrusted to our care for the purpose of experimentation unless direct benefit to the individual is likely to follow. Once this limit is transgressed, the sacred cord which binds physician and patient snaps instantly. Risk to the individual may be taken only with his consent and full knowledge of the circumstances... Enthusiasm for science has, in a few instances, led to regrettable transgressions of this rule.

A hallmark of mentoring in medicine and clinical research is the philosophy, "primum non nocere," or "first, do no harm." In many cases, the ends do not justify the means.

Sir Thomas Huxley, also a revered mentor, wrote, "Sit down before fact as a little child; be prepared to give up every pre-conceived notion; follow humbly wherever and to whatever abyss nature leads, or you shall learn nothing."

Lectures

Character and courage are common threads shared by leaders, role models, great teachers, and mentors. George Washington said, "Labor to keep alive in your breast that little spark of celestial fire called conscience," and Abraham Lincoln declared, "To sin by silence when we should protest makes cowards of men." The Reverend Martin Luther King, Jr. noted that, "In the end, we will remember not the words of our enemies, but the silence of our friends."

The appropriate selection of the mentor, the responsibilities of the parties and the process of assessment, communication and bilateral benefit, are inherent if the following sequence is applied:

- Recruitment
- Selection
- Training the mentor
- Matching
- Contact
- Building the relationship
- Outlining of roles and tasks
- Communication
- Assessing and addressing discovered needs
- Strategy formation and adjustment
- Mentoring of the mentor
- Recognizing that there may or may not be an end

The value of mentoring lies in its potential to avert the situation described in this poem:

I DON'T KNOW

There is something I don't know,
That I am supposed to know.

I don't know what it is I don't know,
And yet I am supposed to know it.

And I feel I look stupid if I seem both not to know it—
And not to know what it is I don't know

Therefore, I pretend to know it.
This is nerve-wracking since I don't know
What I pretend to know,
Therefore I pretend to know everything.

Anonymous

The less of this lament that occurs in our world, so much the better.